

30-045-27645

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

|                                                                                                                |                                                              |
|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| 1a. TYPE OF WORK<br>DRILL                                                                                      | 5. LEASE NUMBER<br>NM-010989                                 |
| 1b. TYPE OF WELL<br>GAS                                                                                        | 6. IF INDIAN, ALL. OR TRIBE NAME                             |
| 2. OPERATOR<br>SOUTHLAND ROYALTY CO.<br>21281                                                                  | 7. UNIT AGREEMENT NAME                                       |
| 3. ADDRESS & PHONE NO. OF OPERATOR<br>P O BOX 4289<br>FARMINGTON, NM 87499                                     | 8. FARM OR LEASE NAME<br>HORTON 10515                        |
| 4. LOCATION OF WELL<br>1460'S 1535'W                                                                           | 9. WELL NO.<br>1R                                            |
| 14. DISTANCE IN MILES FROM NEAREST TOWN<br>3 MILES W OF CEDAR HILL                                             | 10. FIELD, POOL, OR WILDCAT<br>BLANCO MESA VERDE 72319       |
| 15. DISTANCE FROM<br>PROPOSED LOCATION 1460'<br>TO NEAREST PROPERTY<br>OR LEASE LINE.                          | 11. SEC. T. R. M OR BLK.<br>K SEC. 35 T32N R11W NMPM         |
| 16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL<br>2480 5/ 320.00                                                | 12. COUNTY 13. STATE<br>SAN JUAN NM                          |
| 18. DISTANCE FROM<br>PROPOSED LOCATION<br>TO NEAREST WELL DR. 400'<br>COMPL., OR APPLIED<br>FOR ON THIS LEASE. | 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS<br>5550' ROTARY |
| 21. ELEVATIONS (DF, FT, GR, ETC.)<br>6052'GL                                                                   | 22. APPROX. DATE WORK WILL START                             |

23. PROPOSED CASING AND CEMENTING PROGRAM

\*SEE OPERATIONS PLAN

"Approval of this action does  
not warrant that the applicant  
holds legal or equitable rights  
by title to this land."  
DATE

24. AUTHORIZED BY: [Signature]  
REG. DRILLING ENGR.

PERMIT NO. 100181990 APPROVAL DATE MAR 12 1990  
APPROVED BY CON. DIV. TITLE AREA MANAGER

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-3.

Submit to Appropriate  
District Office  
State Leases - 4 copies  
Fee Leases - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

|                                                                                                    |               |                                   |                  |                           |  |
|----------------------------------------------------------------------------------------------------|---------------|-----------------------------------|------------------|---------------------------|--|
| Operator<br>Southland Royalty Company                                                              |               | Lease<br>Horton                   |                  | Well No.<br>1-R           |  |
| Unit Letter<br>K                                                                                   | Section<br>35 | Township<br>32 North              | Range<br>11 West | County<br>San Juan        |  |
| Actual Footage Location of Well:<br>1460 feet from the South line and 1535 feet from the West line |               |                                   |                  |                           |  |
| Ground level Elev.<br>6052'                                                                        |               | Producing Formation<br>Mesa Verde |                  | Pool<br>Blanco Mesa Verde |  |
| Dedicated Acreage:<br>320.00 Acres                                                                 |               |                                   |                  |                           |  |

1. Outline the acreage dedicated to the subject well by colored pencil or hectare marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consolidation

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Peggy Bradford*  
Signature

Peggy Bradford  
Printed Name

Position  
Regulatory Affairs

Company  
Southland Royalty

Date  
1-10-90

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

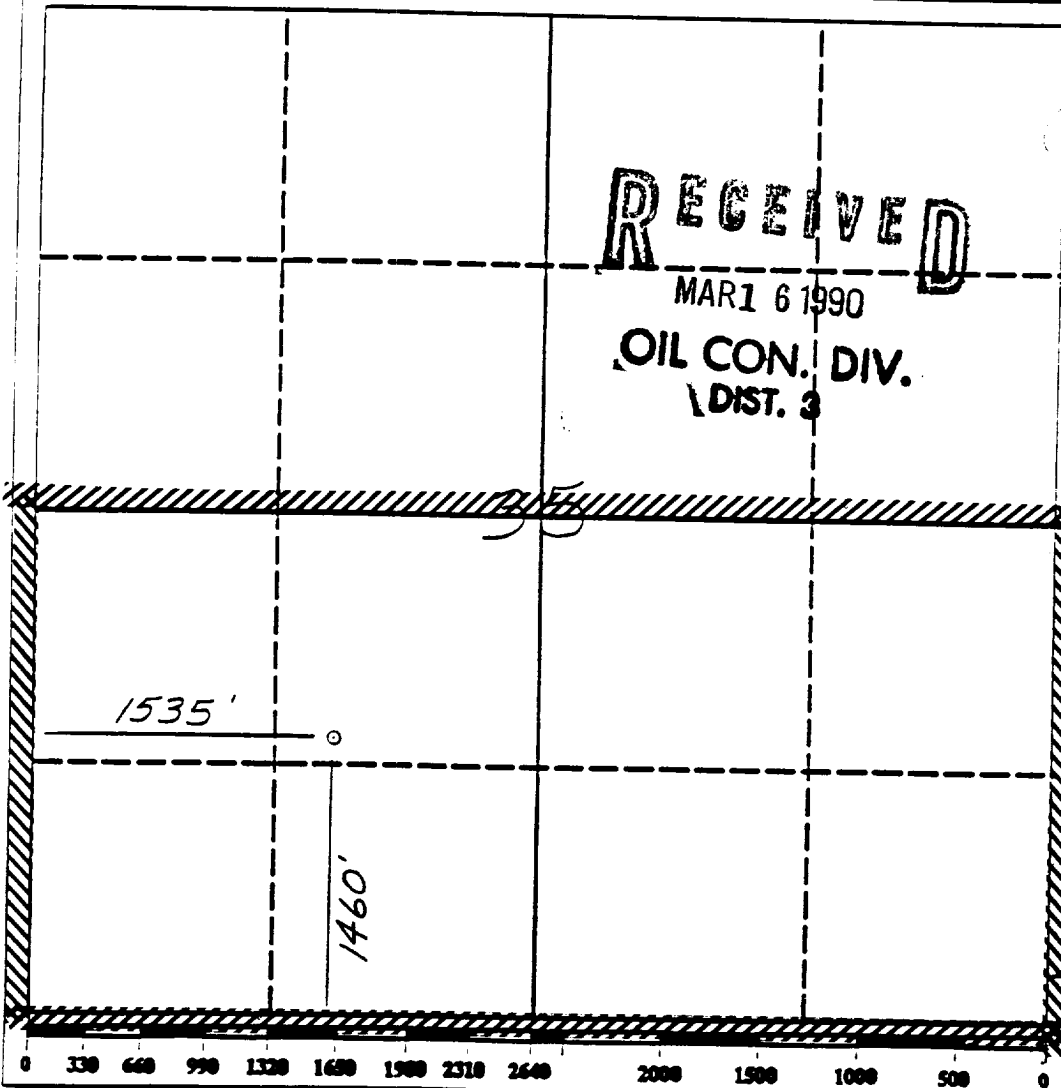
*NEALE O. EDWARDS*  
Date Surveyed  
Signature of Sealer  
Professional Surveyor

857

REGISTERED LAND SURVEYOR

*NEALE O. EDWARDS*  
Signature

Certificate No.  
6857



NOV 1960  
C. T. B.

## OPERATIONS PLAN

Well Name - HORTON #1R

Date: 13-Feb-90

I. Location: 1460'FSL, 1535'FWL, Sec. 35, T32N, R11W San Juan County, NM

Field: BLANCO MESA VERDE

Elevation: 6052 'GL

### II. Geology:

|                    |                 |         |                 |        |
|--------------------|-----------------|---------|-----------------|--------|
| A. Formation Tops: | Animas          | Surface | Chacra          | 3525 ' |
|                    | Ojo Alamo       | 1195 '  | Mesa Verde      | 4315 ' |
|                    | Kirtland        | 1225 '  | Menefee         | 4685 ' |
|                    | Fruitland       | 2375 '  | Pt. Lookout     | 5045 ' |
|                    | Pictured Cliffs | 2785 '  | Intermediate TD | 3200 ' |
|                    | Lewis           | 2985 '  | Total Depth     | 5550 ' |

B. Logging Program: Inter Depth logs: NONE  
Total Depth Logs: GR-IND, D, N, TEMP.

C. Coring: None

D. Natural Gauges: 3490', 3870', 4250', 4500', 4650', 5000', 5050', 5550'. Also gauge any noticeable increase in gas. Record all gauges in IADC daily drilling report and on MERIDIAN OIL morning report.

### III. Drilling:

A: Mud Program: Mud from surface to ITD@ 3200 '. Gas from intermediate casing to Total Depth.

### IV. Materials:

|                    |           |        |          |        |       |
|--------------------|-----------|--------|----------|--------|-------|
| A. Casing Program: | Hole Size | Depth  | Csg Size | Weight | Grade |
|                    | 12 1/4"   | 200 '  | 9 5/8"   | 32.3#  | H-40  |
|                    | 8 3/4"    | 3200 ' | 7"       | 20.0#  | K-55  |
|                    | 6 1/4"    | 5550 ' | 4 1/2"   | 10.5#  | K-55  |

B. Float Equipment: 9 5/8" surface casing - Saw Tooth guide shoe.

7" intermediate casing - guide shoe and self-fill insert float valve. Five centralizers run every other joint above shoe. Run float two joints above the guide shoe.

4 1/2" production casing - liner hanger with neoprene packoff. Cement nose guide shoe and float collar run above a 6' shoe joint.

C. Tubing: 5550 ' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a seating nipple one joint off bottom and expendable check valve on bottom.

D. Wellhead Equipment: 9 5/8" x 11" 2000 psi xmas tree assembly.

BLM ROW

T32N, R11W

Sec 34: SESE

400'

T31N, R11W

Sec 3: NESE

300'

2: SWSW

1400'

11: N2NW

2500'

SE NW

350'

SW NE

1100'

W2 SE

2000'

SE SE

600'

14: SWSW

1350'

New Construction

400'

BLM

34

Fee

Horton # 1R

1460' FSL, 1535' FWL

SEC. 35-T32N- R11W

SAN JUAN Co. NM

400' NEW CONSTRUCTION

MAP # 1

BLM

Flume

Fee

SIPHON

HEAD GATE

ANIMAS